

with the programs. Fig. 3 shows an example of assigned code rates in the case where the programs and the auxiliary data are multiplexed to transmit. As shown in Fig. 3, the code rate assigned to each program is variably controlled by the statistical multiplexing technique, while the code rate assigned to the auxiliary data is always fixed.

However, as a result of the code rate assigned to the auxiliary data being fixed in this manner, empty data are transmitted when the amount of the auxiliary data is small, so that there has been a problem that waste is much. Furthermore, even though improvement of image quality can be intended by increasing the code rate assigned to the program data when the amount of the auxiliary data is small, such assignment is not performed conventionally.

SUMMARY OF THE INVENTION

The present invention has been achieved in light of the foregoing problems and its object is to provide a statistical multiplex system, a statistical multiplex controller and a method of statistical multiplex, whereby the assignments of the code rates are performed efficiently and the image quality can be improved.

A statistical multiplex system according to the present invention is provided with: a plurality of image encoding means for encoding a plurality of program data, each of which includes image data, and outputting the resultant; at least one information encoding means for encoding auxiliary data other than the program data, and outputting the resultant; multiplex